ABSTRACT OF THE DISCLOSURE

The present invention provides an optical apparatus comprising an optical gain correction filter having a multilayer film structure formed by stacking a plurality of thin films with different diffractive indexes on a light transmitting board, wherein when the light with the wavelength λ enters at the incident angle θ, the transmissivity is assumed to be T1 (λ, θ) (0 $\leqq$ T1 (λ, θ) $\leqq$ 1), and the thickness and stacking state of each thin film of the optical gain correction filter are adjusted to increase the transmissivity T1 (λ_0, θ) when the incident angle θ increases close to the predetermined maximum incident angle θmax with respect to the incident light with the wavelength λ_0. The optical apparatus is applied to a bar code reader.